

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.ispto.gov

DATE MAILED: 02/05/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/497,774	02/03/2000	Edith H. Stern	BC9-99-059	7893	
23334 75	90 02/05/2003				
FLEIT, KAIN	•	EXAMINER			
	OMMERCE CENTER	LAFORGIA, CHRISTIAN A			
BOCA RATON	EST 77TH STREET, S I. FL 33487	SOILE III	ART UNIT	PAPER NUMBER	
	,	· -	2155		

Please find below and/or attached an Office communication concerning this application or proceeding.

A

mi@~a		Application No.		\nnlicont/o\				
		Application No.		Applicant(s)	7			
• •	Office Action Summers	09/497,774		STERN ET AL.				
Office Action Summary		Examiner	,	Art Unit				
		Christian La For		2155				
Period fo	The MAILING DATE of this communication ap or Reply	ppears on the cove	r sheet with the col	respondence addre	ss			
THE I - Externanter - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPLINATION DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a replination of the provision of the provision of the period for reply is specified above, the maximum statutory period reply within the set or extended period for reply will, by statute the provision of the provision	.136(a). In no event, how oly within the statutory mind will apply and will expire te, cause the application t	ever, may a reply be timely nimum of thirty (30) days w SIX (6) MONTHS from the o become ABANDONED	y filed vill be considered timely. e mailing date of this comm (35 U.S.C. § 133).	unication.			
1) <u></u>	Responsive to communication(s) filed on 06	March 2002						
2a)□		his action is non-f	nal					
′=	Since this application is in condition for allow			secution as to the m	norito io			
3)	closed in accordance with the practice under				ieniis is			
Dispositi	on of Claims							
4)🖂	Claim(s) <u>1-47</u> is/are pending in the application	n.						
	4a) Of the above claim(s) is/are withdra	awn from consider	ation.					
5)	Claim(s) is/are allowed.		•					
6)⊠	Claim(s) <u>1-47</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
•	Claim(s) are subject to restriction and/on Papers	or election require	ment.					
9) 🗆 .	The specification is objected to by the Examin	er.						
·	Γhe drawing(s) filed on <u>03 February 2000</u> is/ar		r b) Objected to b	y the Examiner.				
,	Applicant may not request that any objection to the	•	-					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No.							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment	•	and priority dilucit c	20.0.0. 33 120 0					
1) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 5) 3. 6)		PTO-413) Paper No(s). ent Application (PTO-15				
S Patent and Tr	adamatic Office							

Art Unit: 2155

DETAILED ACTION

1. Claims 1 through 47 are presented for examination.

Drawings

- 2. The drawings are objected to because the drawings infringe upon the accepted margins and the lines, numbers, and characters are not of uniform thickness. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 3. The Patent and Trademark Office no longer makes drawing changes. See 1017 O.G. 4. It is applicant's responsibility to ensure that the drawings are corrected. Corrections must be made in accordance with the instructions below.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, MUST be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Art Unit: 2155

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 5. Claims 1, 6, 7, 25, 29, 30, 33, 35, 36, 41, and 45 through 47 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,418,473 to St. Maurice et al., (hereinafter St. Maurice).
- 6. As per claim 1, St. Maurice teaches a system for transmitting data in a data stream to grouped recipients, comprising:
- 7. a server, for receiving users' requests for transmission of the data to the users (Figures 2, 3, 4, & 5; column 2, lines 32-42; column 2, line 59 to column 3, line 6);
- 8. the server, responsive to the users' requests, arranging the users in groups with each the user being arranged in a respective group (column 2, line 59 to column 3, line 6); and
- 9. the server, responsive to the arrangement of the users in the groups, for transmitting the data in a data stream to the respective groups (column 2, line 59 to column 3, line 6).

- 10. Regarding claim 6, St. Maurice teaches wherein, the telecommunications medium is the Internet (Figures 2 & 3; column 1, lines 49-50; column 2, lines 43-58).
- 11. Regarding claim 7, St. Maurice teaches wherein, the user's requests are received from a world wide web browser (column 3, line 31 to column 4, line 24).
- 12. As per claim 25, St. Maurice teaches a system for transmitting data in a data stream sent from a server to a plurality of users requesting access to the data stream at substantially the same time, and responsive to users' requests for data, arranging the users into groups by time or number of requests, for transmission of the same data in the data stream to the respective users in respective groups, and distributing the user load on the server and shifting the user load toward a steady state load by distributing the groups over the data transmission by time of the data transmission or place in the data transmission, comprising:
- 13. a server (Figures 2, 3, 4, & 5; column 2, lines 32-42; column 2, line 59 to column 3, line 6);
- 14. the server having means for connecting the server to a telecommunications network for the transmission of data (Figures 2, 3, 4, & 5; column 2, lines 32-42; column 2, line 59 to column 3, line 6); and
- 15. the server including means for responding to requests received from the telecommunications network for data, for identifying the individual requesters as the source of respective requests and arranging the individual requesters in respective groups for receiving the data in a data stream (column 2, line 59 to column 3, line 6).

- 16. With regards to claim 29, St. Maurice teaches wherein the telecommunications medium is the Internet (Figures 2 & 3; column 1, lines 49-50; column 2, lines 43-58).
- 17. With regards to claim 30, St. Maurice teaches wherein the user's requests are received from a world wide web browser (column 3, line 31 to column 4, line 24).
- 18. As per claim 33, St. Maurice teaches a method for transmitting data to users requesting the data, arranged in groups to receive the data, comprising the steps of:
- 19. connecting a server having a data store, and an interface for connection to the server for sending data from the data store through the telecommunications medium (Figures 2, 3, 4, & 5; column 2, lines 32-42; column 2, line 59 to column 3, line 6);
- 20. responsive to requests, arranging the users in groups with each the user being arranged in a respective group (column 2, line 59 to column 3, line 6); and
- 21. sending the data stream from the data store, as streaming data to the respective groups (Abstract; column 2, line 59 to column 3, line 6).
- 22. Concerning claim 35, St. Maurice teaches including the step of sending the data through the Internet (Figures 2 & 3; column 1, lines 49-50; column 2, lines 43-58).
- 23. Concerning claim 36, St. Maurice teaches including the step of receiving the user's requests from a world wide web browser (column 3, line 31 to column 4, line 24).

- As per claim 41, St. Maurice teaches a system for transmitting data in a data stream sent from a server to a plurality of users requesting access to the data stream at substantially the same time, a method for arranging the users into groups by time or number of requests, for transmission of the data in the data stream to the respective users in respective groups, and distributing the user load on the server and shifting the user load toward a steady state load by distributing the groups over the data transmission by time of the data transmission or place in the data transmission, comprising the steps of,
- 25. arranging a server having a data processor to a telecommunications network for the transmission of data (Figures 2, 3, 4, & 5; column 2, lines 32-42; column 2, line 59 to column 3, line 6); and
- 26. responding to requests for data received through the telecommunications network, for identifying the individual requesters as the source of respective requests and arranging the individual requesters in respective groups for receiving the data (column 2, line 59 to column 3, line 6; column 3, lines 10-25).
- 27. As per claim 45, St. Maurice teaches a computer program product for use in the operation of a computer transmitting data in a data stream to users requesting the data, comprising,
- 28. means for connecting a telecommunications medium for sending the data to the users of the data (Figures 2, 3, 4, & 5; column 2, lines 32-42; column 2, line 59 to column 3, line 6);
- 29. means for arranging the users in groups with each the user being arranged in a respective group, responsive to a request made by the user (Figures 1, 2, & 3; column 2, lines 32-58); and

- 30. means for sending the data stream from the data store, as streaming data to the respective groups (column 2, line 59 to column 3, line 6).
- 31. As per claim 46, St. Maurice teaches a system for transmitting data in a data stream sent from a server to a plurality of users requesting access to the data stream at substantially the same time, a computer program product for use in a method of operating a computer for arranging the users into groups by time or number of requests, for transmission of the data in a data stream to the respective users in respective groups, and distributing the user load by distributing the groups over the data transmission by time of the data transmission or place in the data transmission, comprising the steps of,
- 32. responding to requests for data received from requesting users, for identifying the individual requesters as the source of respective requests and arranging the individual requesters in respective groups for receiving the data (column 2, line 59 to column 3, line 6); and
- 33. distributing the groups over the data transmission by time of the data transmission or place in the data transmission (column 2, line 59 to column 3, line 6).
- 34. As per claim 47, St. Maurice teaches a computer program product for use in a method of operating a computer, comprising the steps of:
- 35. receiving requests for data from users requesting the data (column 2, line 59 to column 3, line 6);
- 36. arranging the users in groups with each the user being arranged in a respective group (Figures 1, 2, & 3; column 2, lines 32-58); and

Art Unit: 2155

37. responsive to the users' requests, sending the data stream from the data store, as streaming data to the respective groups with the groups receiving separate respective portions of the data relatively displaced in space or time (column 2, line 59 to column 3, line 6).

Claim Rejections - 35 USC § 103

- 38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 39. Claims 2, 4, 8 through 21, 26, 27, 31, 32, 37, 39, and 42 through 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. Maurice in view of United States Patent No. 5,953,506 to Kalra et al., (hereinafter Kalra).
- 40. Regarding claim 2, St. Maurice does not teach wherein, the server realigns a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream, responsive to a signal from the respective user.
- Kalra teaches wherein, the server realigns a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream, responsive to a signal from the respective user (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the relative position of Kalra with the system of St. Maurice because it allows a user to vary the speed of the streaming content or pick up at certain points in the content without destroying its intelligibility.

Art Unit: 2155

42. Regarding claim 4, St. Maurice does not teach wherein, the server arranges the users into the groups arranged by a time interval for assembling the group.

- 43. Kalra teaches wherein, the server arranges the users into the groups arranged by a time interval for assembling the group (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the arrangement method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users whom request similar data at approximately the same time.
- 44. Regarding claim 8, St. Maurice does not teaches wherein, the data is transmitted with identifiable locations in the data stream;
- 45. the server identifying a respective identifiable location in the data steam corresponding to the request; and
- 46. the server, moving the respective user to another of the groups receiving the data stream from another location in the data stream related to the respective identifiable location.
- 47. Kalra teaches wherein, the data is transmitted with identifiable locations in the data stream (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53);
- 48. the server identifying a respective identifiable location in the data steam corresponding to the request (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53); and
- 49. the server, moving the respective user to another of the groups receiving the data stream from another location in the data stream related to the respective identifiable location (Figures

Art Unit: 2155

2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.

- 50. With regards to claim 9, St. Maurice does not teach wherein, the related location is advanced in time of transmission of the data stream relative to the respective identifiable location.
- 51. Kalra teaches wherein, the related location is advanced in time of transmission of the data stream relative to the respective identifiable location (Figures 7a, 7b, 9b2, 9c, 12, 13, 15c, 16a1, & 16b; column 4, lines 13-33; column 6, lines 36-53). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the groups streaming data's integrity.
- 52. Concerning claim 10, St. Maurice does not teach wherein, the related location is delayed in time of transmission of the data stream, relative to the respective identifiable location.
- 53. Kalra teaches wherein, the related location is delayed in time of transmission of the data stream, relative to the respective identifiable location (Figures 7a, 7b, 9b2, 9c, 12, 13, 15c, 16a1, & 16b; column 4, lines 13-33; column 6, lines 36-53). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of

Art Unit: 2155

Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the groups streaming data's integrity.

- With regards to claim 11, St. Maurice teaches wherein, the server has a plurality of ports and with each the group connected to a respective port for receiving the data stream from separate respective locations in the data stream through a respective port (column 3, lines 7-25); and
- 55. the server, moving the user to a the separate respective location in the data stream by reconnecting the user to another of the respective ports (column 3, lines 7-25).
- 56. Regarding claim 12, St. Maurice teaches wherein, the server has a plurality of respective ports (column 3, lines 7-25); and,
- 57. the server is connected to users and the groups through separate respective ports (column 3, lines 7-25).
- 58. St. Maurice does not teach the server realigning a respective user with the data stream to change the data stream location the user is receiving the data or to change the time in the transmission of the data stream the user is receiving the transmission, by reconnecting the user to another of the respective ports.
- 59. Kalra teaches the server realigning a respective user with the data stream to change the data stream location the user is receiving the data or to change the time in the transmission of the data stream the user is receiving the transmission, by reconnecting the user to another of the respective ports (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3

Art Unit: 2155

to column 18, line 9). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.

- 60. Regarding claim 13, St. Maurice teaches wherein, the respective ports have a plurality of respective sockets and the users are connected to respective sockets (column 3, lines 7-25).
- 61. St. Maurice does not teach the server has a plurality of pointers into separate respective locations in the data store associated with respective sockets, for sending data from the separate respective locations in the data store to the respective sockets and to the respective users associated with the respective sockets; and
- 62. the server realigning a respective user with the data stream to change the location in the data stream the user is receiving the data or the time in the transmission in the data stream, the user is receiving the data, by reconnecting the respective user to another respective socket connected to another respective pointer.
- 63. Kalra teaches the server has a plurality of pointers into separate respective locations in the data store associated with respective sockets, for sending data from the separate respective locations in the data store to the respective sockets and to the respective users associated with the respective sockets (Figure 7a; column 9, line 63 to column 10, line 45); and
- 64. the server realigning a respective user with the data stream to change the location in the data stream the user is receiving the data or the time in the transmission in the data stream, the user is receiving the data, by reconnecting the respective user to another respective socket

Art Unit: 2155

connected to another respective pointer (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.

- 65. Regarding claim 14, St. Maurice teaches wherein the ports have a plurality of respective sockets and the respective users are connected to respective sockets (column 3, lines 7-25).
- 66. St. Maurice does not teach the server has a plurality of pointers, into separate respective locations in the data store, connected with respective sockets, for sending data from the separate respective locations in the data store to the respective sockets and the respective users connected to the respective sockets; and
- 67. the server realigning a respective user with the data stream to change the location in the data stream the user is receiving the data or the time in the transmission in the data stream, the user is receiving the data, by moving the pointer for a respective socket to another location in the data store.
- 68. Kalra teaches the server has a plurality of pointers, into separate respective locations in the data store, connected with respective sockets, for sending data from the separate respective locations in the data store to the respective sockets and the respective users connected to the respective sockets (Figure 7a; column 9, line 63 to column 10, line 45); and
- 69. the server realigning a respective user with the data stream to change the location in the data stream the user is receiving the data or the time in the transmission in the data stream, the

Art Unit: 2155

user is receiving the data, by moving the pointer for a respective socket to another location in the data store (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.

- 70. Regarding claim 15, St. Maurice does not teach wherein the position of the user relative to the data in the data stream is changed in relation to the location of the data being transmitted in the data stream.
- Kalra teaches wherein the position of the user relative to the data in the data stream is changed in relation to the location of the data being transmitted in the data stream (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53; column 9, line 63 to column 10, line 45). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the relative position of Kalra with the system of St. Maurice because it allows a user to vary the speed of the streaming content or pick up at certain points in the content without destroying its intelligibility.
- 72. Regarding claim 16, St. Maurice does not teach wherein the position of the user relative the data in the data stream is changed in relation to the time of transmission of the data.
- 73. Kalra teaches wherein the position of the user relative the data in the data stream is changed in relation to the time of transmission of the data (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, &

Page 15

Application/Control Number: 09/497,774

Art Unit: 2155

12; column 4, lines 13-33; column 6, lines 11-53; column 9, line 63 to column 10, line 45). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the relative position of Kalra with the system of St. Maurice because it allows a user to vary the speed of the streaming content or pick up at certain points in the content without destroying its intelligibility.

- 74. Regarding claim 17, St. Maurice teaches further comprising:
- 75. means for signaling connected to the users for sending discrete respective signals to the server (column 3, lines 7-25);
- 76. St. Maurice does not teach the server, responsive to the discrete respective signals, realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream; and
- 77. wherein, the realignment is in discrete steps relative to position of the respective user to the data being transmitted in the data stream.
- 78. Kalra teaches the server, responsive to the discrete respective signals, realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53); and
- 79. wherein, the realignment is in discrete steps relative to position of the respective user to the data being transmitted in the data stream (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving

Art Unit: 2155

method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.

- 80. Regarding claim 18, St. Maurice does not teach wherein, the discrete respective signals include signals for advancing or retarding the realignment of the respective position of the respective user.
- Kalra teaches wherein, the discrete respective signals include signals for advancing or retarding the realignment of the respective position of the respective user (Figures 7a, 7b, 9b2, 9c, 12, 13, 15c, 16a1, & 16b; column 4, lines 13-33; column 6, lines 36-53). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the advancing/retarding method of Kalra with the system of St. Maurice because it enables a method to fast forward/rewind the streaming data without destroying the groups streaming data's integrity.
- 82. Regarding claim 19, St. Maurice teaches wherein, the discrete respective signals include signals for realignment in discrete intervals (column 3, lines 7-25; column 3, line 30 to column 4, line 24).
- 83. Regarding claim 20, St. Maurice does not teach wherein the discrete intervals are intervals of time displacement.
- 84. Kalra teaches wherein the discrete intervals are intervals of time displacement (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53; column 9, line 63 to

Art Unit: 2155

column 10, line 45). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the relative position with respect to time of Kalra with the system of St. Maurice because it allows a user to manipulate the streaming content or pick up at certain points in the content without destroying its intelligibility.

- 85. Regarding claim 21, St. Maurice does not teach wherein the discrete intervals are intervals of space displacement in the location of the data in the data stream.
- 86. Kalra teaches wherein the discrete intervals are intervals of space displacement in the location of the data in the data stream (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53; column 9, line 63 to column 10, line 45). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the relative position with respect to time of Kalra with the system of St. Maurice because it allows a user to manipulate the streaming content or jump to certain points in the streaming media.
- 87. With regards to claim 26, St. Maurice does not teach wherein, the groups are arranged by number of the individual requesters.
- 88. Kalra teaches wherein, the groups are arranged by number of the individual requesters (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the relative position of Kalra with the system of St. Maurice because it allows a user to vary the speed of the streaming content or pick up at certain points in the content without destroying its intelligibility.

- 89. With regards to claim 27, St. Maurice does not teach wherein, the groups are arranged by the time of the requests.
- 90. Kalra teaches wherein, the groups are arranged by the time of the requests (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the arrangement method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users whom request similar data at approximately the same time.
- 91. With regards to claim 31, St. Maurice does not teach wherein the server includes means for shifting the respective individual requesters between the groups to change the time of reception of the data relative to the data transmission.
- 92. Kalra teaches wherein the server includes means for shifting the respective individual requesters between the groups to change the time of reception of the data relative to the data transmission (Figures 7a, 7b, 9b2, 9c, 12, 13, 15c, 16a1, & 16b; column 4, lines 13-33; column 6, lines 36-53). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the groups streaming data's integrity.

- 93. With regards to claim 32, St. Maurice teaches wherein, the data is accessed from a data store (Figures 1, 2, 3).
- 94. St. Maurice does not teach the server includes means for changing the location in the data store accessed for shifting the location of the data relative to the data transmission.
- 85. Kalra teaches the server includes means for changing the location in the data store accessed for shifting the location of the data relative to the data transmission (Figures 7a, 7b, 9b2, 9c, 12, 13, 15c, 16a1, & 16b; column 4, lines 13-33; column 6, lines 36-53). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the groups streaming data's integrity.
- 96. Concerning claim 37, St. Maurice does not teach wherein, the step of arranging includes the step of realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream, responsive to a signal from the respective user.
- 97. Kalra teaches wherein, the step of arranging includes the step of realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream, responsive to a signal from the respective user (Figures 4, 5, 6a, 7a, 7b, 7d, 9b1, & 12; column 4, lines 13-33; column 6, lines 11-53). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.

Page 20

Application/Control Number: 09/497,774

- 98. Concerning claim 39, St. Maurice does not teach wherein, the step of arranging, arranges the users into the groups arranged by a time interval for assembling the group.
- by a time interval for assembling the group (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the arrangement method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users whom request similar data at approximately the same time.
- 100. Regarding claim 42, St. Maurice does not teach wherein, the step of arranging includes the step of realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream, responsive to a signal from the respective user.
- 101. Kalra teaches wherein, the step of arranging includes the step of realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream, responsive to a signal from the respective user (Figures 2a, 2b, 5, 7a, 7b, 9c, & 15c; column 15, lines 33-44; column 17, line 3 to column 18, line 9). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.

- 102. With regards to claim 43, St. Maurice does not teach wherein, the step of arranging includes the step of arranging the groups by number of the individual requesters.
- 103. Kalra teaches wherein, the step of arranging includes the step of arranging the groups by number of the individual requesters (Figure 7a; column 9, line 63 to column 10, line 45). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the moving method of Kalra with the system of St. Maurice because it enables a method to conserve bandwidth amongst users without destroying the streaming data's integrity.
- 104. Concerning claim 44, St. Maurice teaches wherein, the step of arranging includes the step of arranging the groups by the time of the requests (column 3, lines 7-25; column 3, line 30 to column 4, line 24).
- 105. Claims 3, 5, 28, 34, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. Maurice in view United States Patent No. 6,411,616 to Donahue et al., (hereinafter Donahue).
- 106. Regarding claim 3, St. Maurice does not teach wherein, the server arranges the users into the groups arranged by the size of the group.
- 107. Donahue teaches wherein, the server arranges the users into the groups arranged by the size of the group (Figures 1d, 2, 6, 7, 8a, 8b, 22, 24, 25, & 26; column 7, lines 12-23; column 8, lines 24-43). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to combine the groupings of Donahue with the system of St. Maurice because it would maximize accessibility of certain data to more users more readily.

- 108. Regarding claim 5, St. Maurice does not teach wherein, the server is limited to a maximum number of the groups and arranges the groups in relation to the maximum number.
- 109. Donahue teaches wherein, the server is limited to a maximum number of the groups and arranges the groups in relation to the maximum number (Figures 1d, 2, 6, 7, 8a, 8b, 22, 24, 25, & 26; column 8, lines 44-65; column 9, lines 43-63). It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the groupings of Donahue with the system of St. Maurice because it would maximize accessibility of certain data to more users.
- 110. With regards to claim 28, St. Maurice does not teach wherein the server is limited to a maximum number of the groups and data processor arranges the groups in relation to the maximum number.
- Donahue teaches wherein the server is limited to a maximum number of the groups and data processor arranges the groups in relation to the maximum number (Figures 1d, 2, 6, 7, 8a, 8b, 22, 24, 25, & 26; column 8, lines 44-65; column 9, lines 43-63). It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the groupings of Donahue with the system of St. Maurice because it would maximize accessibility of certain data to more users.
- 112. Concerning claim 34, St. Maurice does not teach wherein the step of arranging includes the step of arranging the groups in relation to a maximum number of the groups the server can send the data.

Art Unit: 2155

113. Donahue teaches wherein the step of arranging includes the step of arranging the groups in relation to a maximum number of the groups the server can send the data (Figures 1d, 2, 6, 7, 8a, 8b, 22, 24, 25, & 26; column 7, lines 12-23; column 8, lines 24-43). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to combine the groupings of Donahue with the system of St. Maurice because it would maximize accessibility of certain data to more users more readily.

- 114. Concerning claim 38, St. Maurice does not teach teaches wherein, the step of arranging, arranges the users into the groups arranged by the size of the group.
- Donahue teaches wherein, the step of arranging, arranges the users into the groups arranged by the size of the group (Figures 1d, 2, 6, 7, 8a, 8b, 22, 24, 25, & 26; column 8, lines 44-65; column 9, lines 43-63). It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the groupings of Donahue with the system of St. Maurice because it would maximize accessibility of certain data to more users.
- 120. Claims 22 through 24 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. Maurice in view of United States Patent No. 6,415,326 to Gupta et al., (hereinafter Gupta).
- 121. Concerning claim 22, St. Maurice does not teach wherein, the server includes means for disconnecting a respective user with the data stream at an identifiable location in the data stream and for reconnecting the user to another data stream.

Application/Control Number: 09/497,774 Page 24

Art Unit: 2155

122. Gupta teaches wherein, the server includes means for disconnecting a respective user with the data stream at an identifiable location in the data stream and for reconnecting the user to another data stream (Figures 1 & 4; column 2, lines 41-53; column 9, lines 17-23). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the stream changing of Gupta with the system of St. Maurice, because it would enable a method to view large media streams by dispersing the media over several servers.

- 123. With regards to claim 23, St. Maurice does not teach wherein, the server includes means for disconnecting the respective user with another data stream after a discrete interval and reconnecting the user with the data stream at the identifiable location.
- 124. Gupta teaches wherein, the server includes means for disconnecting the respective user with another data stream after a discrete interval and reconnecting the user with the data stream at the identifiable location (Figures 1 & 4; column 2, lines 41-53; column 9, lines 17-23). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the stream changing of Gupta with the system of St. Maurice, because it would enable a method to view large media streams by dispersing the media over several servers.
- 125. Concerning claim 24, St. Maurice does not teach wherein, the server means for reconnecting the user with the data stream is a pointer for accessing data in the data store at discrete locations.
- 126. Gupta teaches wherein, the server means for reconnecting the user with the data stream is a pointer for accessing data in the data store at discrete locations (Figures 1 & 4; column 2, lines

Art Unit: 2155

41-53; column 9, lines 17-23). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the stream changing of Gupta with the system of St. Maurice, because it would enable a method to view large media streams by dispersing the media over several servers.

- 127. Concerning claim 40, St. Maurice does not teach wherein, the data is transmitted with identifiable locations in the data stream, and the method further comprising the steps of:
- 128. identifying a respective identifiable location in the data steam corresponding to the user signal; and
- 129. moving the user to another of the groups receiving the data stream from a location in the data stream related to the respective identifiable location.
- 130. Gupta teaches wherein, the data is transmitted with identifiable locations in the data stream, and the method further comprising the steps of:
- 131. identifying a respective identifiable location in the data steam corresponding to the user signal (Figures 1 & 4; column 2, lines 41-53; column 9, lines 17-23); and
- 132. moving the user to another of the groups receiving the data stream from a location in the data stream related to the respective identifiable location (Figures 1 & 4; column 2, lines 41-53; column 9, lines 17-23). It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the stream changing of Gupta with the system of St. Maurice, because it would enable a method to view large media streams by dispersing the media over several servers.



Art Unit: 2155

Conclusion

133. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

134. The following patents are cited to further show the state of the art with respect to multicasting, such as:

United States Patent No. 6,128,649 to Smith et al., which is cited to show selecting media streams.

United States Patent No. 6,359,902 to Putzolu, which is cited to show a system for the delivery of multimedia streams.

135. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (703) 305-7704. The examiner can normally be reached on Monday thru Thursday 7-5.

136. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7240 for regular communications and (703) 746-7239 for After Final communications.

137. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Christian La Forgia Patent Examiner Art Unit 2155

clf January 30, 2003

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Page 26